Integrated Delivery Schedule Update

Governing Board Meeting – March 12, 2015

Tom Teets – Division Director
Office of Everglades Policy & Coordination

Overview

- Team Activities
- Workshop #3 – Analysis of public sequencing plans
- Feedback Received
- Next Steps

Team Activities

- Briefed WRAC on status
- Analyzed stakeholder sequencing plans
  - Created 4 themes
- Conducted Workshop #3 with stakeholders

Draft IDS Worksheet

Project	Yellow Book Code	Fiscal Year																
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Federal Construction Cost			105	102	70	59	4	1	20	10	6	0	0	0	0	0	0
Non-Federal Construction Cost			66	90	45	2	2	1	1	1	1	0	0	0	0	0	0
Total Construction Cost			171	192	115	61	6	2	21	11	7	0	0	0	0	0	0
Modified Water Deliveries to Everglades National Park*																	
Herbert Hoover Dike*																	
Seminole Big Cypress*	OPE																
Restoration Strategies*																	
Tamiami Trail Next Steps Phase 1*																	
Kissimmee River Restoration																	
West Palm Beach Canal/STA-1E																	
C-111 South Dade																	
Picayune Strand Restoration	OPE																
Merritt Pump Station																	
Faka Union Pump Station																	
Manatee Mitigation and Flood Protection Features																	
Miller Pump Station																	
Remaining Features - Road removal and canal backfill																	
Site 1 Impoundment - Phase 1	M_P1																
Indian River Lagoon-South																	
C-44 Intake Canal	B																
C-44 Reservoir	B																
C-44 STA & Pump Station	B																
Decomp Physical Model	QQ_P1																
Caloosahatchee River (C-43) West Basin Storage Reservoir - Phase 1	D_P1																
Broward County Water Preserve Areas: C-11 Impoundment	Q																
Loxahatchee River Watershed Restoration Project	X, Y, K, GGG, OPE																

Operational Testing and Monitoring Period

Design

Planning

Construction

Blue = Non-Federal

Black = Federal

* Funded through other program authorities or by other entities.

Non-CERP and Foundation Projec

CERP - Authorized, appropriated, PPA executed

CERP - Authorized, requires PPA

CERP Planning Phase - Requires authorization

Public Sequencing Plan Examples

Integrated Delivery Schedule
Sequencing Plan Summary Sheet

Sequencing Plan Name: Establish a Unique and Descriptive Name of the Proposed Sequencing Plan.

Maximizing Ecological Benefits & Economic Return

Author of the Sequencing Plan: Identify the name of the Au… Sequencing Plan during the exercise and identify spokespers…

Anticipated Benefits: Identify geographic, ecological, hydr… benefits of your sequencing plan.

This plan focuses on projects t… the region to deliver widesprea… from the Northern Estuaries … Everglades and Biscayne Natio…

Priorities for Concurrent Progress

~~**Sequencing Plan:**~~ Identify projects in your recommended ord… what projects show go below the black line on the Draft IDS W…

1. Planning & Design
2. • EAA Reservoir Phase 1&2
3. • BBCW Phase 1 & 2 (including l…
4. • C111 spreader remainder of west … (19…
5. • Remainder of IRL South
6. Construction
   • Broward WPA
   • C43 (portion not funded …
   • CEPP (once authorized)

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Integrated Delivery Sched…
Sequencing Plan Summary S…

Sequencing Plan Name:
"Not Just Our Pet Pig": Northern Estuaries Protection and Ev… Benefits Sequencing Plan

Author of the Sequencing Plan: Identify the name of the Au… Sequencing Plan during the exercise and identify spokespers…

Anticipated Benefits: Identify geographic, ecological, hydr… benefits of your sequencing plan.

Geographic: reaching an overarching goal for Everglades res… sustainable wading bird population, provide water supply for a… supply for the Lake O service area users, and ability to send r… the ENP.

The following is an excerpt from the IRL-S PIR which support… geographic benefits of our sequencing plan. Although throug… write up we have relied heavily on our familiarity with the IRL-… should be noted that this type of information is available for al… listed in our sequencing plan.

"Further, scientists have identified the large spatial extent of s… one of the defining physical characteristics of the pre-drainag… the south Florida wetlands, in combination with the complex r… multiple populations of plants and animals to thrive and persis… the pre-drainage area in south Florida made it possible for the… support genetically viable numbers and sub-populations of sp… ranges and/or narrow habitat requirements; • provide the aqu… large numbers of higher vertebrate animals in a naturally nutr… • sustain habitat diversity despite natural disturbances. The al… to recover from disturbances decreases as the available habit… habitat diversity, the amount of seasonal refugia, and the num… also decrease (USACE, 1999). In south Florida roughly 50 percent of the pre-drainage

Integrated Delivery Schedule
Sequencing Plan Summary Sheet

Sequencing Plan Name: Establish a Unique and Descriptive Name of the Proposed Sequencing Plan. Central Flow

Author of the Sequencing Plan: Identify the name of the Author(s) that developed the Sequencing Plan during the exercise and identify spokesperson if applicable.

Anticipated Benefits: Identify geographic, ecological, hydrological, and/or economic benefits of your sequencing plan.

- Focus on implementing CEPP as quickly as possible
- ~~with~~ Additional storage to relieve N. Estuaries + benefit Central Everglades + Southern Estuaries + gain flexibility to adapt to climate change
- Control seepage E of ~~WCA3~~ ENP + WCA3B to enable higher stages in the Everglades
- Continue Progress on BBCW, C111 Spreader, Decomp

Sequencing Plan: Identify projects in your recommended order of sequencing. (i.e. what projects show go below the black line on the Draft IDS Worksheet)

1. CEPP: ⓐ South ⓑ North ⓒ New Water
2. Storage: ⓐ HH benefits per ~~each~~ each reach (Interim LORS change) ⓑ Lake Okeechobee Watershed
3. ⓒ → (Dr. Rudnick only: EAA Storage)
4. Seepage Mgmt: ⓐ ENP Seepage management ⓑ 3A/3B ~~top~~ Seepage management, C11
5. To maximize ecol benefits: ⓐ complete C111SCW ⓑ complete BBCW Ph. I ⓒ After CEPP, complete remaining Decomp ⓓ PIRs for C111SC Eastern + BBCW Phase 2
6.

Addendum from D. Rudnick (JC only): Initiate L-28 interceptor proj. to address ~~wat~~ WCA-3A water quality

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Sub-set of CERP Projects Included by Workshop Participants

- BCWPA
- BBCW P1 & P2
- C111SC P1 & P2
- C-43
- CEPP
- Decomp
- EAA P1 & P2
- ENP Seepage Management
- IRL-S C23/24, C25
- IRL-S Natural Lands
- L-28 Interceptor
- Lake Belt Storage
- LO ASR
- Lox River
- LOW
- Strazzulla (OPE)
- Operational Changes
  - Lake Istokpoga Regulation Schedule
  - Holey Land & Rotenberger (HL & RTB)
  - Revise LORS

Complete Existing Projects & Plan Ahead

Max Ecological Benefits & Economic Returns	Run 1 - FWF	Focus on The Heart	Store/Treat/Move Water South & Manage Estuaries
BCWPA	BCWPA	BCWPA_C11	C-43
C-43	C-43	BCWPA	BCWPA_C11
CEPP-South	BBCW_P1	C-111SC _P1	BCWPA
CEPP- North	CEPP South	C-43	BBCW_P1
CEPP New Water	CEPP North	BBCW_P1	BBCW_P2
EAA P1&P2	CEPP New Water	CEPP South	C-111 SC_P1
BBCW_P1	EAA_P1&P2	CEPP North	C-111 SC_P2
BBCW_P2		CEPP New Water	CEPP South
C-111SC_P1		C-111SC_P2	CEPP North
C-111SC_P2		EAA_P1&P2	CEPP New Water
IRL-S C23/24		IRL-S C23/24	Storage, Treat N, S & Lake O
IRL-S C25		IRL-S C25	
		BBCW_P2	

Construction: BCWPA, C-43, BBCW_P1, CEPP South, CEPP North, CEPP New Water, C-111SC_P1 , IRL-S C23/24, ILR-S C25

Planning: C-111SC_P2, EAA P1&P2, BBCW_P2, LOW, LO ASR

Greater Everglades & Storage

Protect & Enhance Existing Natural Systems	NOW!	Central Flow
CEPP South	CEPP South	CEPP South
BCWPA_C11	C-111SC_P1	CEPP North
BCWPA_C9	BBCW_P1	CEPP New Water
More STAs	LOW	Rev. LORS
EAA_P1&P2	CEPP New Water	LOW
C-43	CEPP North	EAA_P1&P2
Decomp	C-43	ENP Seepage Mngmnt
Strazulla		BCWPA_Seep Mngmnt
Rev LORS		C-111SC_P1
BCWPA		Decomp
C111SC_P2		C-111SC_P2
CEPP North		BBCW_P2
CEPP New Water		
BBCW_P1		
LOW		
Lox River		

Construction: BCWPA-C11, C-111SC_P1, CEPP South, CEPP North, CEPP New Water, C-43, BBCW_P1

Planning: LOW, EAA_P1&P2, Decomp, Rev LORS, Lox River, C-111SC_P2, BBCW_P2

Focus on Storage

Keeping Promises	Early Benefits & Critical Infrastructure	Keepin Promises - Principle & Projects	Greater Everglades Northern Estuaries Project
EAA_P1&P2	EAA_P1&P2	EAA_P1&P2	EAA P1&P2
L-28 Interceptor	CEPP New Water	L-28 Interceptor	LOW
Rev. LORS	CEPP North	Rev. LORS	HL & RTB
HL & RTB	BCWPA_C11	Lake Istokpoga	Lake O ASR
Lox River	C-43		CEPP North
Lake Istokpoga	BBCW_P1		CEPP South
	C111SC_P1		CEPP New Water
	LOW		Rev LORS
	Lox River		
	Rev LORS		

Construction: BCWPA-C11, C-43, CEPP South, CEPP North, CEPP New Water, BBCW_P1

Planning: EAA_P1&P2, L-28 Interceptor, LOW, HL & RTB, LO ASR, Rev LORS

Spatial Extent, Estuaries, Restore Flow South

New Source for BBCW Phase 2	Keeping Promises - Principles & Projects 2	Low Hanging Fruit, Estuarine Friendly & More Water South	Not Just Our Pet Pig - Northern Estuaries Protection & Everglades Regional Benefits	Estuary Health (Increasing Storage North of Lake O)
Lake Belt Storage	EAA_P1&P2	BBCW_P1	C-43	IRL-S Natural Land
BBCW_P1	IRL-S Natural Land	BBCW_P2	IRL-S C23/24	IRL_S C23/C24
BBCW_P2	C-43	Rev LORS	IRL-S Natural Land	IRL_S C25
C-111SC_P2	CEPP South	C-111SC_P1	Lake O ASR	C-43
C-111SC_P1	CEPP North	CEPP New Water	CEPP North	Lake O ASR
	CEPP New Water	EAA_P1	CEPP South	EAA_P1&P2
	L-28 Interceptor	EAA_P2	EAA_P1&P2	CEPP South
	Lox River	IRL-S Natural Land	LOW	CEPP North
	Rev LORS	Reservoir Miami	Lox River	CEPP New Water
	HL&RTB	IRL-S C23/C24	BBCW_P2	LOW
	IRL-S C-23/24	IRL-S C25	BBCW_P1	

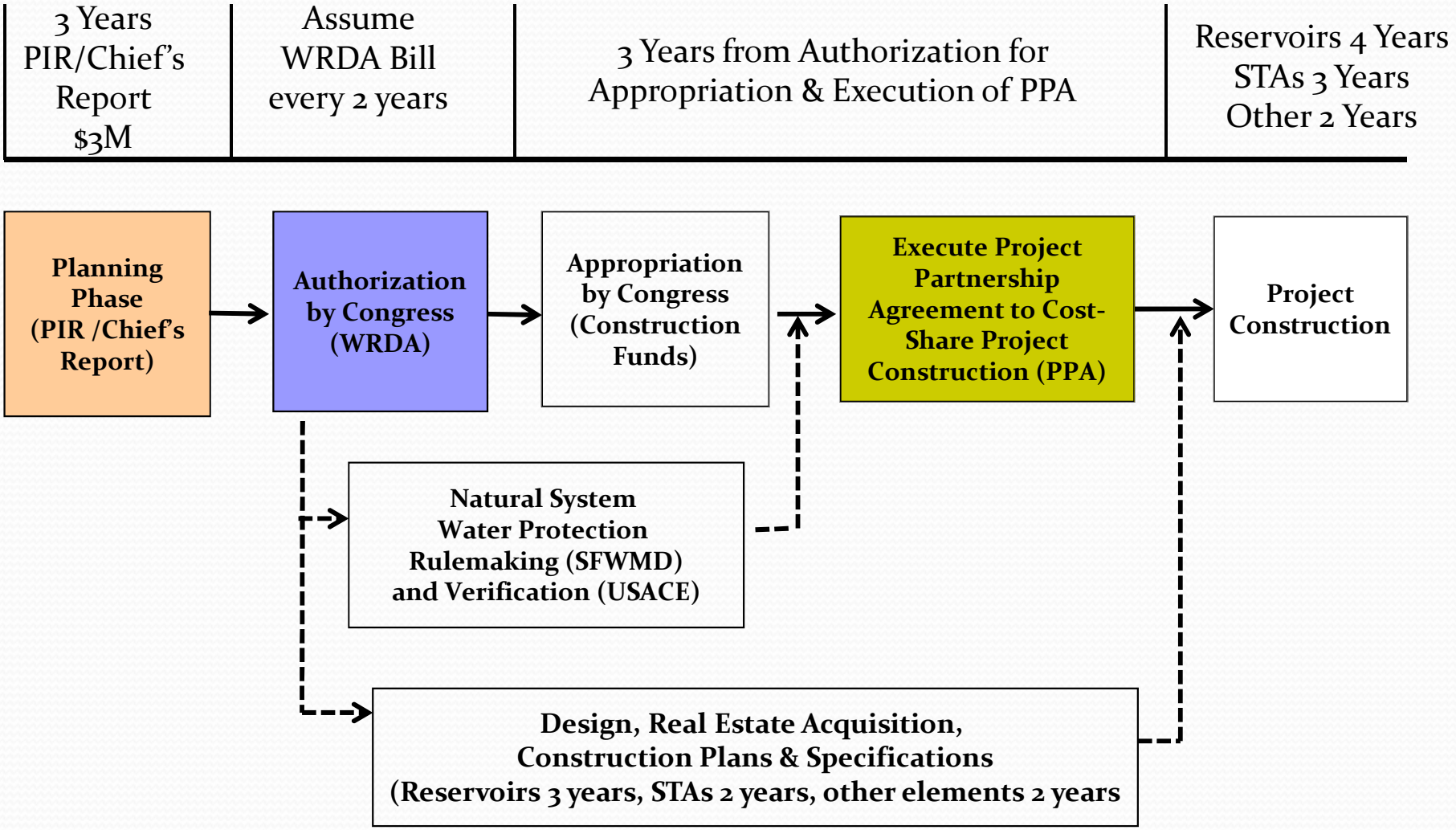
Construction: IRL Natural Lands, BBCW_P1, C-43, IRL-S C23/24, C-111SC_P1, CEPP South, CEPP North, CEPP New Water

Planning: BBCW_P2, EAA_P1&P2, LO ASR, C-111SC_P2, LOW, Lake Belt Storage, Lox River

Feedback Received

- Clarification of team analysis and themes
- Land acquisition vs construction
- Relationship of storage & ASR
- Complexity of the process
- Include environmental benefits in analysis
- Examine the uncertainties and risks of projects

Federal Process Assumptions



Next Steps

- Build sequencing plans based on process, design and construction durations
- Develop funding scenarios through application of assumptions, dependencies and constraints
- Schedule:
  - Workshop #4 – TBD
  - Continue development – Spring/ Summer 2015
  - Final Integrated Schedule – Fall 2015

Questions?

http://www.evergladesrestoration.gov/content/ids.html